

# NEIGHBORHOOD LEVY PROJECT



TRANSPORTATION

## Neighborhood Safety, Connectivity and Congestion Levy Transportation Commission Update

November 9, 2017

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# Neighborhood Congestion Reduction Program

- *(Per Ordinance 6304) Projects to address and ease congestion for motor vehicles within, near and/or connecting neighborhoods to services to improve access and mobility.*
- Small to medium sized near-term projects
- Program covers:
  - Traffic studies
  - Outreach
  - Preliminary and final design
  - Construction



# Program Review with Transportation Commission

- ✓ October 26<sup>th</sup>: Review scoring criteria
- **November 9<sup>th</sup>: Finalize scoring system**
- January 2018: Present project list and recommended allocation of budget for 2018
- Spring/Summer 2018: Develop allocation of budget for 2019/2020 biennium

# Scoring Criteria – Tier I & Tier II

- Tier I –condense project list to identify those which will receive further traffic analysis
- Tier II – after the completion of traffic studies, Tier II will further inform which projects advance on to design and eventual construction

# Project List

## *The origin of projects*

- Citizen Comments collected during July 2016 levy outreach
- Comprehensive Transportation Project List (including the TFP)
- Locations noted in the 2017 Concurrency Report that exceed the maximum Intersection LOS for the Mobility Management Areas (MMA)
- Staff recommendations from past citizen inquiries

# Scoring Criteria – Tier I

See Attachment B.

## STEP ONE: EVALUATION PRIOR TO TRAFFIC STUDY

Initial list ranks candidates for need, irrespective of cost.

<b>(0) Pass/Fail - does addressing congestion require redevelopment or a future outside-led project?</b>	
Pass	Candidates whose congestion mitigation can be implemented without significant outside involvement
Fail	Mitigating congestion would require redevelopment or a future outside-led project
<b>80% (1) Existing Vehicle LOS - for intersections, LOS will be used; for corridors, MMLOS travel times will be used.</b>	
<i>See attached DRAFT 2017 Transportation Facilities Plan (TFP) Intersection Table (only 'need') and MMLOS Corridor Table (only 'need')</i>	
80	Intersections: LOS E,F; Corridors: above the recommended corridor LOS
40	Intersections: LOS D; Corridors: at the recommended corridor LOS
0	Intersections: LOS A, B, C; Corridors: below the recommended corridor LOS
<b>20% (2) Safety - does the candidate location exhibit an existing safety need?</b>	
20	The location exhibits a quantifiable potential for safety improvement based on existing conditions
0	The location does not exhibit a potential for safety improvement based on existing conditions



## LOS for Intersections

### NEEDS

LOS Current v/c MMA Awstd	A, B, C < 0.80 Better than 15% of	D btw 0.80 & 0.90 Btw 15% & 5% of	E, F ≥ 0.90 Within 5%, at or exceeds
	Both favorable conditions apply	Either/or conditions apply	Both unfavorable conditions apply
	<b>Low</b>	<b>Medium</b>	<b>High</b>
	<b>0</b>	<b>40</b>	<b>80</b>

Source: 2017 Transportation Facilities Plan (TFP) - Modified



SE 8<sup>th</sup> St/Lake Hills Connector



2017 V/C Ratio: 0.91

MMA Area: Richards Valley (v/c: 0.85)

7% above MMA Area-wide Standard

<p><b>E, F</b>  <b>&gt;= 0.90</b>  <b>Within 5%, at or exceeds</b></p>
<p>Both unfavorable conditions apply</p>
<p><b>High</b></p>
<p><b>80</b></p>



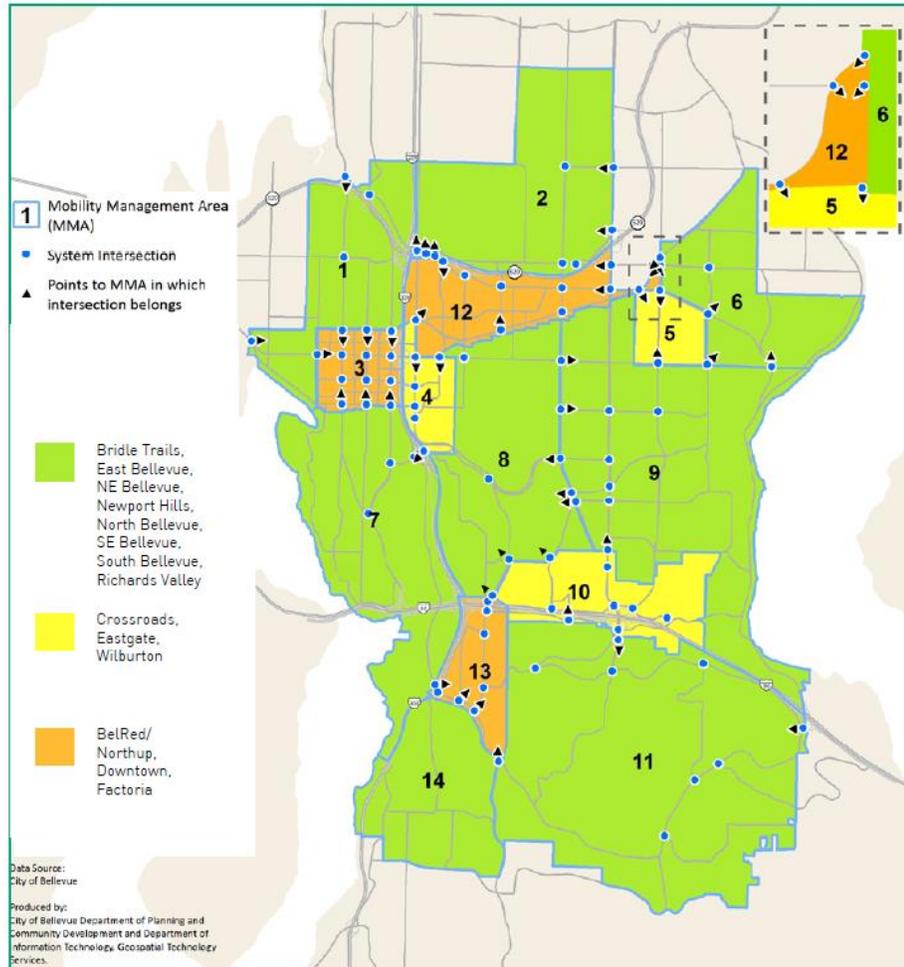
**Table 3. Vehicle Corridor Level-of-Service**

<b>LOS</b>	<b>Typical Urban Travel Time/Travel Speed on Corridors Based on 40% of the Posted Speed Limit</b>
	Less than 90% of Typical Urban Travel Time   Faster than 1.1 times the Typical Urban Travel Speed
	90-110% of Typical Urban Travel Time   Between 1.1 and .9 times the Typical Urban Travel Speed
	110-155% of Typical Urban Travel Time   Between .9 and .75 times the Typical Urban Travel Speed
	155-200% of Typical Urban Travel Time   Between .75 and .5 times the Typical Urban Travel Speed
	More than 200% of Typical Urban Travel Time   Slower than .5 times the Typical Urban Travel Speed

Source: MMLOS Metrics, Standards & Guidelines (2017)



Figure 2. Recommended Corridor LOS Guidelines by MMA



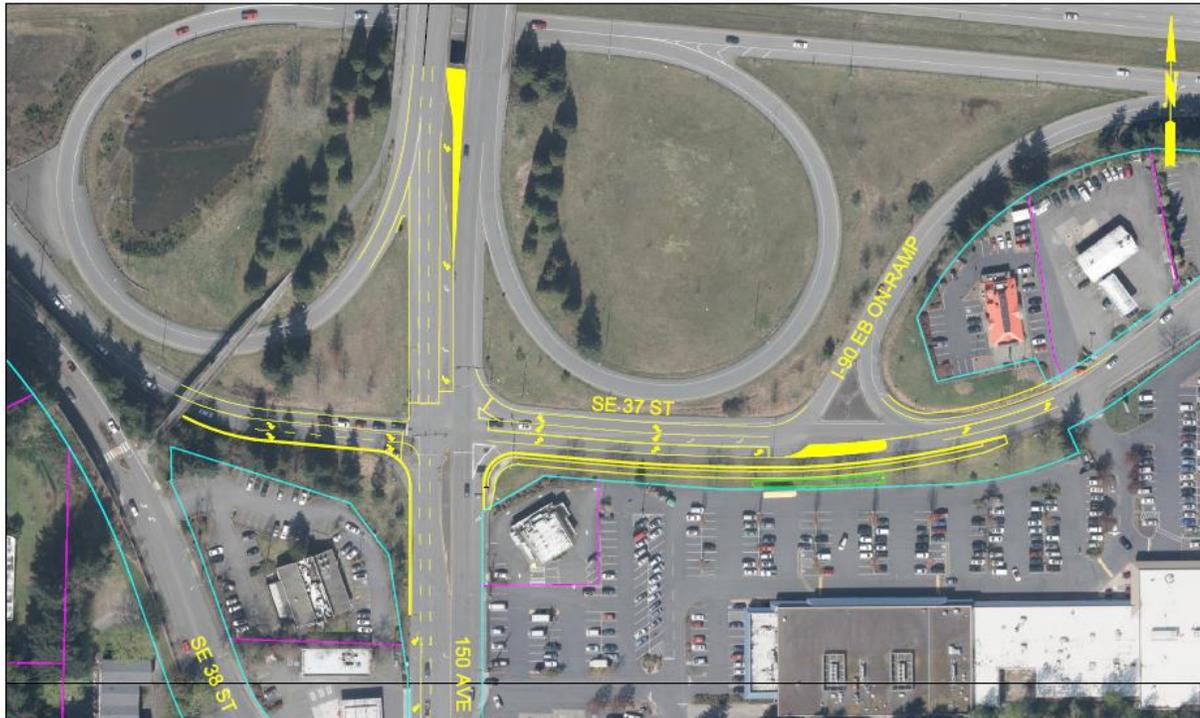
	90-110% of Typical Urban Travel Time   Between 1.1 and .9 times the Typical Urban Travel Speed
	110-155% of Typical Urban Travel Time   Between .9 and .75 times the Typical Urban Travel Speed
	155-200% of Typical Urban Travel Time   Between .75 and .5 times the Typical Urban Travel Speed

Source: MMLOS Metrics, Standards & Guidelines (2017)



## LOS for Corridors

Low	Medium	High
The corridor LOS is <b>above</b> the recommended	The corridor LOS is <b>within</b> the recommended	The corridor LOS is currently <b>below</b> the recommended
<b>0</b>	<b>40</b>	<b>80</b>



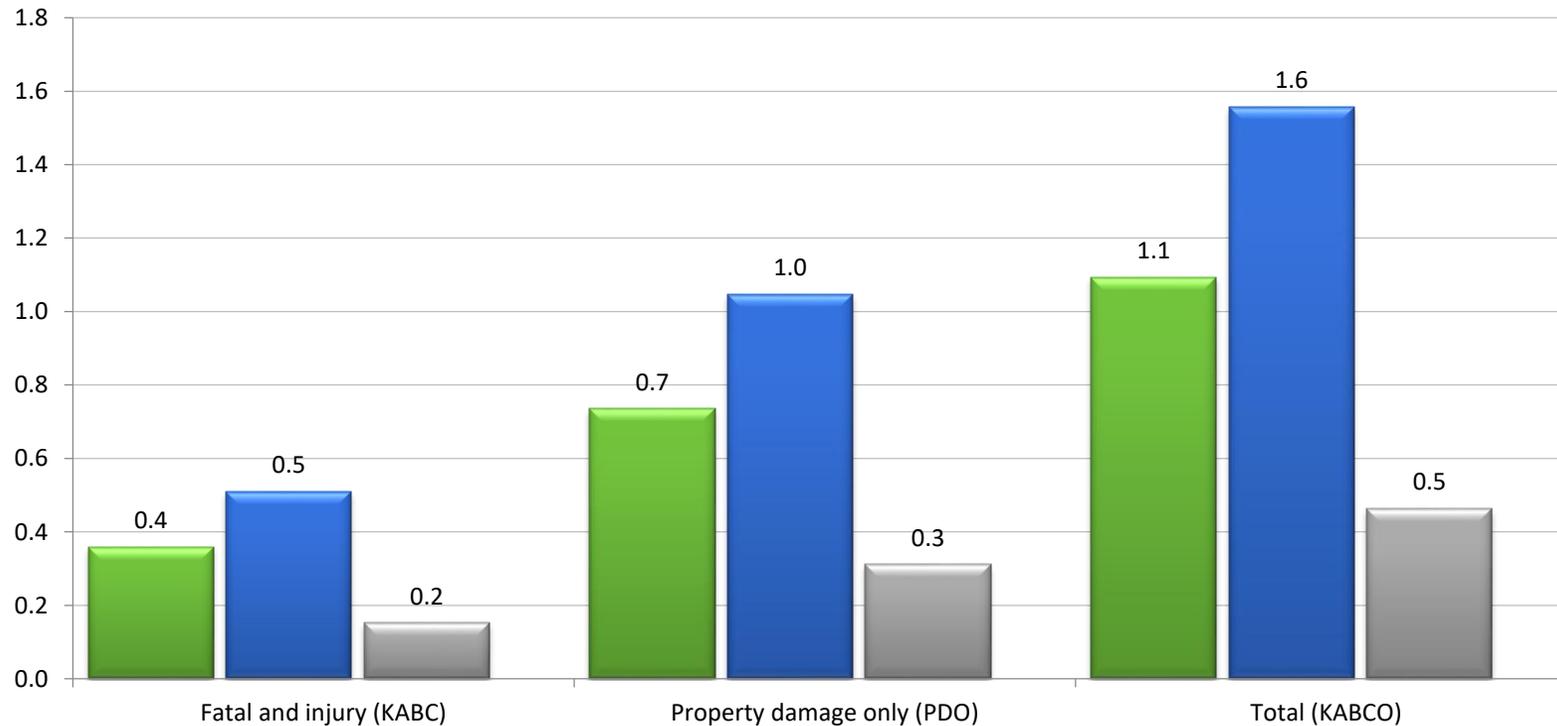
- Current Vehicle Travel Speed: 5.5 mph
- Recommended Corridor Travel Speed: 10.5 mph to 12.6mph

High
The corridor LOS is currently <b>below</b> the recommended
80



- Does the location currently exhibit a potential for safety benefit?

**Summary of Anticipated Safety Performance of the Project  
(average crashes/yr)**



# Scoring Criteria – Tier II

## See Attachment B.

### STEP TWO: EVALUATION PRIOR TO FINAL DESIGN

Tier 2 list ranks candidates to select those which will move on to final design

<b>70%</b>		<b>(1) Proposed Vehicle LOS - for intersections, LOS will be used; for corridors, MMLOS travel times will be used.</b>
70 pts. Max		<i>See attached DRAFT 2017 Transportation Facilities Plan (TFP) Intersection Table and MMLOS table.</i>
<b>30%</b>		<b>(2) Advantage Points - projects that would receive additional points for the following.</b>
5 points each (30 pts max)		Potential for grant funding - project location is classified as an arterial on WSDOT's Arterial Classification Map
		Ease of implementation - no significant ROW, environmental or cost implication
		Multimodal LOS for pedestrians - project improves pedestrian MMLOS
		Multimodal LOS for bicycles - project improves bicycle MMLOS
		Transit Impact - if the project benefits a frequent transit route (5 pts), if a non-frequent transit route (2 pts)
		Safety - project reduces the number of expected crashes



## LOS for Intersections

		NEEDS			
		A, B, C	D	E, F	
		< 0.80 Better than 15% of Both favorable conditions apply	btw 0.80 & 0.90 Btw 15% & 5% of Either/or conditions apply	>= 0.90 Within 5%, at or exceeds Both unfavorable conditions apply	
<b>BENEFITS</b> Magnitude of Improvement		<b>Intersection Improvement</b> Reduces v/c by	Low	Medium	High
			<b>No V/C change</b> Low	<b>0</b> Maintains LOS A, B, C	<b>10</b> Maintains LOS D
		<b>btw 0 &amp; 0.10</b> Medium	<b>10</b> Possible Letter change e.g. C to B	<b>25</b> Possible Letter change D to C	<b>50</b> Possible Letter change e.g. E to D
		<b>&gt;0.10</b> High	<b>15</b> Good proj but little need e.g. C to B	<b>50</b> LOS D to C	<b>70</b> Excellent project e.g. E to D

Source: 2017 Transportation Facilities Plan (TFP) - Modified



## LOS for Corridors

BENEFITS Change in Typical Urban Travel Time Ratio		NEEDS		
		Low	Medium	High
		The corridor LOS is <b>above</b> the recommended	The corridor LOS is <b>within</b> the recommended	The corridor LOS is currently <b>below</b> the recommended
<b>No change</b>	<b>Low</b>	<b>0</b>	<b>10</b>	<b>15</b>
<b>Btw 0.10-0.20</b>	<b>Medium</b>	<b>10</b>	<b>25</b>	<b>50</b>
<b>&gt;0.20</b>	<b>High</b>	<b>15</b>	<b>50</b>	<b>70</b>

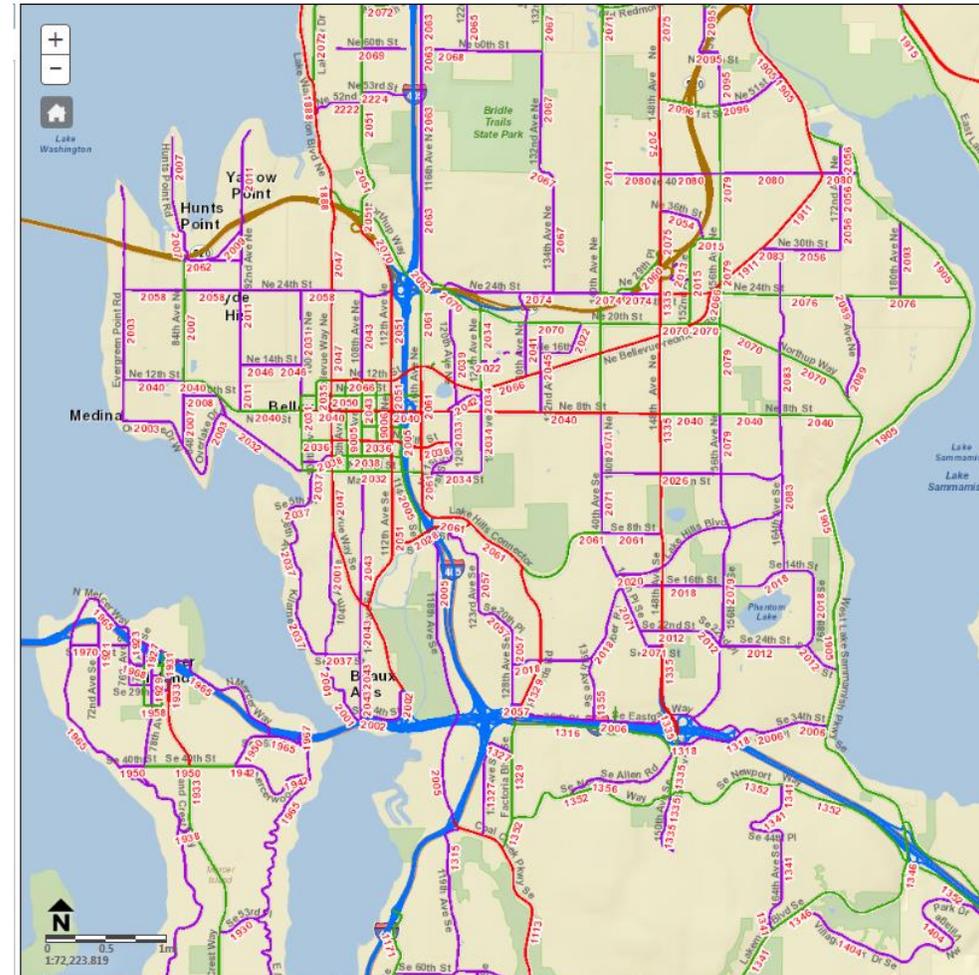
Tier I

Vehicle  
LOS

Extra  
Points

- Grant Opportunity (5 pts)
- Ease of Implementation (5 pts)

WSDOT Functional Classification Map



Source: WSDOT Functional Classification Map (retrieved 11/2017)



- MMLOS for Pedestrians (5 pts)

Table 4. Pedestrian Level-of-Service Summary

Pedestrian LOS	Metric	Implementation	How to Apply
Sidewalk & Landscape Buffer	Combined Width for sidewalk and landscape buffer	Frontage Improvements Capital Investment Program	Standard per Land Use Code and Transportation Design Manual
Intersection Treatment	Design Components	Frontage Improvements Capital Investment Program	Guideline
Mid-Block Crossings	Spacing of Crossings	Frontage Improvements Capital Investment Program	Guideline

Source: MMLOS Metrics, Standards & Guidelines (2017)



- MMLOS for Bicyclists (5 pts)

Table 9. Bellevue Level of Traffic Stress (LTS) Categories

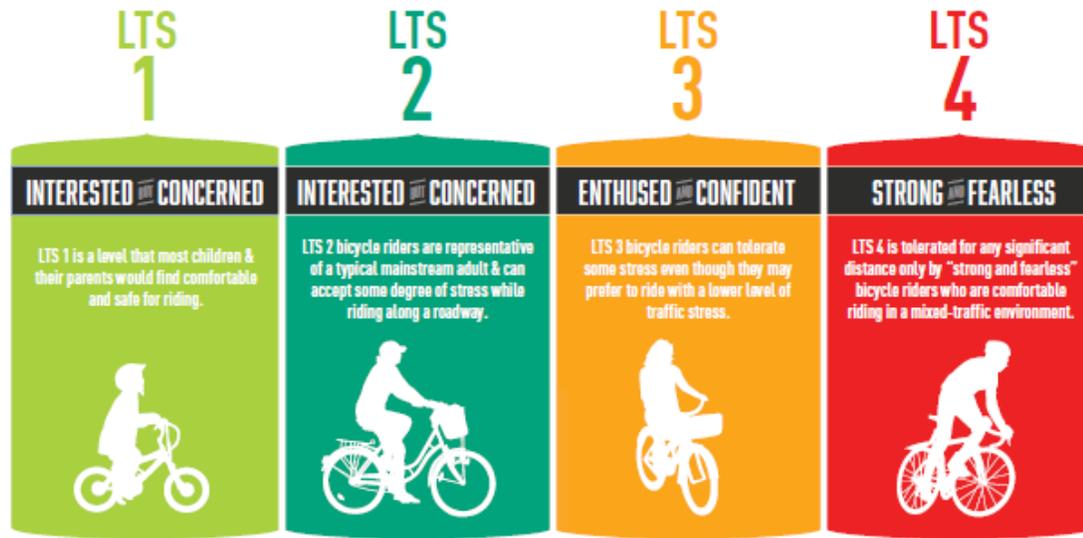


Table 10. Bicycle Level-of-Service/ Level-of Traffic Stress

Roadway Characteristics		Bicycle Facility Components: Guideline to Achieve Intended Level of Service/Level of Traffic Stress					
Speed Limit (MPH)	Arterial Traffic Volume	No Marking	Sharrow Lane Marking	Striped Bike Lane	Buffered Bike Lane (Horizontal)	Protected Bike Lane (Vertical)	Physically Separated Bikeway
</= 25	<3k	1	1	1	1	1	1
	3-7k	3	2	2	2	1	1
	>/=7k	3	3	2	2	1	1
30	<15k	3	3	2	2	1	1
	15-25k	4	4	3	3	3	1
	>/=25k	4	4	3	3	3	1
35	<25k	4	4	3	3	3	1
	>/=25k	4	4	4	3	3	1
>35	Any	4	4	4	4	3	1

Source: MMLOS Metrics, Standards & Guidelines (2017)



# Questions

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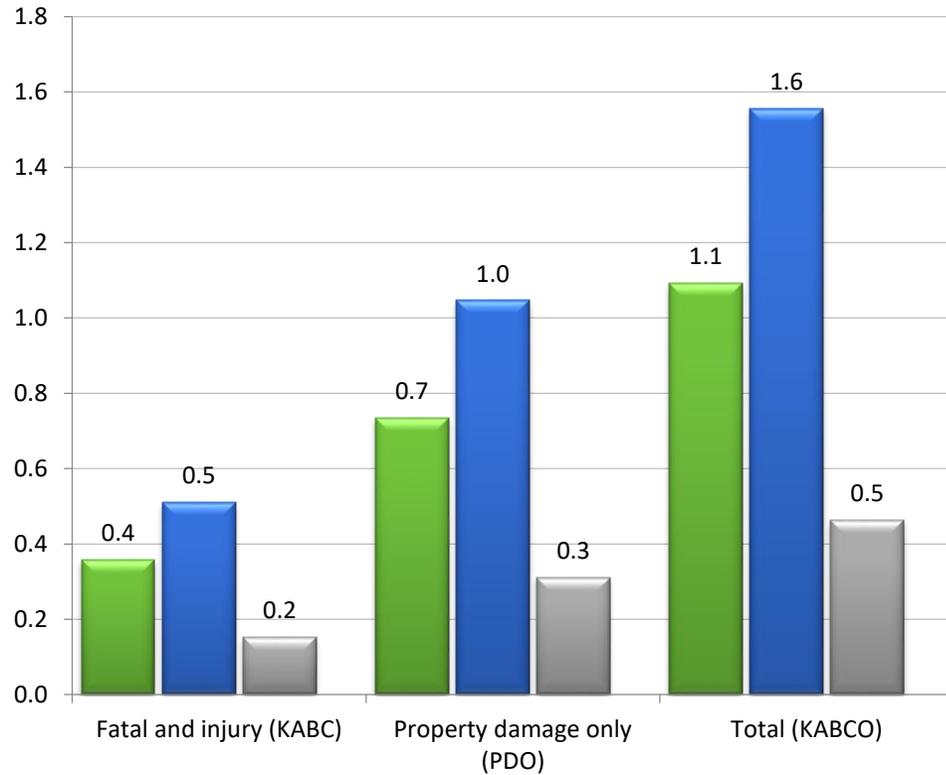
425-452-4491





- Safety (5 pts)

**Existing Conditions**



**Proposed Conditions**

